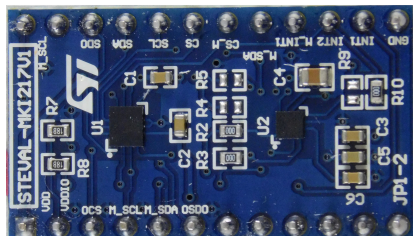# Adapter board for a standard DIL24 socket based on LSM6DSOX and LIS2MDL in sensor hub mode

Features

- Complete LSM6DSOX and LIS2MDL pinouts for a standard DIL24 socket
- Fully compatible with the STEVAL-MKI109V3 and STEVAL-MKI109D evaluation platforms
- RoHS compliant

Description

The STEVAL-MKI217V1 is an adapter board designed to facilitate the evaluation of the LSM6DSOX, 6-axis IMU (inertial measurement unit), and LIS2MDL, 3-axis magnetic sensor, connected in sensor hub mode. The board offers an effective solution for fast system prototyping and device evaluation directly within the user's own application.

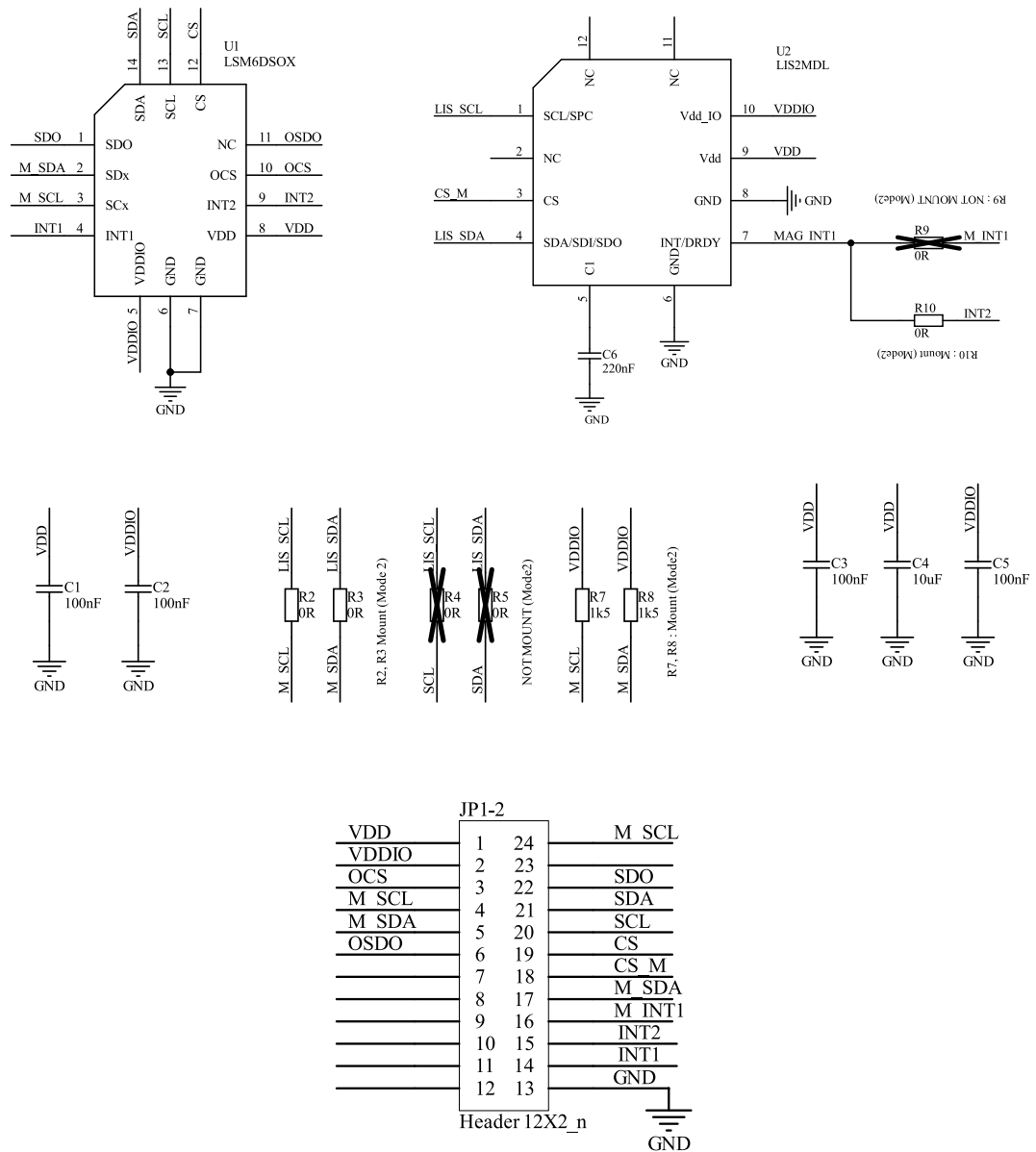The STEVAL-MKI217V1 can be plugged into a standard DIL24 socket.

The adapter provides the complete LSM6DSOX and LIS2MDL pinouts and comes ready to use with the required decoupling capacitors on the VDD power supply line.

This adapter is supported by the STEVAL-MKI109V3 and STEVAL-MKI109D evaluation platforms that include a high-performance 32-bit microcontroller functioning as a bridge between the sensor and a PC, on which it is possible to use the downloadable MEMS Studio graphical user interface or dedicated software routines for customized applications.

Product summary	
Adapter board for standard DIL24 socket based on LSM6DSOX and LIS2MDL in sensor hub mode	STEVAL-MKI217V1
6-axis IMU (inertial measurement unit) with embedded AI: always-on 3-axis accelerometer and 3-axis gyroscope	LSM6DSOX
Digital output magnetic sensor: ultralow-power, high-performance 3-axis magnetometer	LIS2MDL
Professional MEMS tool: ST MEMS adapters motherboard based on the STM32F401VE and compatible with all ST MEMS adapters	STEVAL-MKI109V3
Professional MEMS tool: evaluation board for all ST MEMS sensors	STEVAL-MKI109D
Applications	IoT for smart things

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For further information, contact your local STMicroelectronics sales office.

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1 Schematic diagrams

Figure 1. STEVAL-MKI217V1 board schematic

Revision history

Table 1. Document revision history

Date	Version	Changes
11-Nov-2020	1	Initial release
04-Feb-2021	2	Some edit change to improve readability
20-Sep-2024	3	Updated Description to include MEMS Studio software solution
14-Feb-2025	4	Added STEVAL-MKI109D evaluation platform

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